


# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 1887wo-ag	<b>FOR FURTHER ACTION</b>		See Form PCT/PEA/416
International application No. PCT/FI2004/000255	International filing date (day/month/year) 27.04.2004	Priority date (day/month/year) 14.05.2003	
International Patent Classification (IPC) or national classification and IPC E05B55/12			
Applicant ABLOY OY et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p style="margin-left: 20px;">a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau) a total of 3 sheets, as follows:</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand  23.02.2005		Date of completion of this report  18.07.2005	
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer  Alexopoulos, T  Telephone No. +49 89 2399-2853	



# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/FI2004/000255

## Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

### Description, Pages

1-7 as published

### Claims, Numbers

1-9 received on 23.02.2005 with letter of 23.02.2005

### Drawings, Sheets

1/8-8/8 as published

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/FI2004/000255

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	1-9
	No: Claims	
Inventive step (IS)	Yes: Claims	1-9
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-9
	No: Claims	

2. Citations and explanations (Rule 70.7):

**see separate sheet**

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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:

**see separate sheet**

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.

PCT/FI2004/000255

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

Claim 1:

Prior art DE 3938655 A corresponding to FI 83802 C, page 1 of the description discloses an arrangement for guiding the deadlocking of a latch bolt in a door lock comprising a lock case provided with a latch bolt and an auxiliary bolt cooperating with a guide member upon which act members causing the deadlocking of the latch bolt as in the preamble of claim 1

Problem: To avoid malfunctioning of the deadlocking arrangement

Solution: Said acting members comprise a separate stop member according to the characterising part of claim 1. There is no lead in the available prior art to such an arrangement.

Claims 2-9:

Claims 2-9 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

**Re Item VII**

**Certain defects in the international application**

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document EP 10 31 686 A is not mentioned in the description, nor is this document identified therein.

**Re Item VIII**

**Certain observations on the international application**

The description is not in conformity with the claims as required by Rule 5.1(a)(iii) PCT.

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## AMENDED CLAIMS

1. An arrangement for guiding the deadlocking of a latch bolt in a door lock comprising a lock case (1), which is provided with a latch bolt (3) urged by a spring (5) to a position protruding from the lock case, which latch bolt has a body part (3a) and at least one outwardly tapering wedge-shaped headpiece (3b) pivotably supported by the body part so that the latch bolt (3) may be pressed into the lock case (1) from either side thereof in the direction of door opening or closing due to a force acting upon said at least one wedge-shaped headpiece, an auxiliary bolt (8) urged by a spring (9) to a position protruding from the lock case, and a guide element (7), which is on one hand arranged to accomplish deadlocking of the latch bolt (3) and on the other hand to be in cooperation with the auxiliary bolt (8) so that the auxiliary bolt (8) is arranged to prevent the moving of the guide element (7) to its position providing the deadlocking of the latch bolt (3), while the latch bolt is in its protruding position, said arrangement including members which are arranged to allow the moving of the guide element (7) to a position providing the deadlocking of the latch bolt (3) only in case both the auxiliary bolt (8) and the latch bolt (3) are first moved to their retracted positions, characterised in that said members comprise a separate stop member (11) movably supported by the auxiliary bolt (8), which stop member is arranged to act upon the guide element (7), for instance a protrusion (7c) in it, so that it prevents the moving of the guide element (7) to a position providing the deadlocking of the latch bolt (3), while the auxiliary bolt (8) is in its protruding position, and in that said stop member (11) can be moved to a position, where it correspondingly allows the moving of the guide element (7) to its position providing the deadlocking of the latch bolt (3).

2. An arrangement according to claim 1, characterised in that the stop member (11) is urged by a spring (12) to its position allowing the moving of the guide element (7).

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3. An arrangement according to claim 1 or 2, characterised in that the auxiliary bolt (8) is provided with a guiding piece (10) attached to the lock case (1), which guiding piece defines the freedom of movement of the stop member (11) and is arranged to guide the movements of the auxiliary bolt (8).

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4. An arrangement according to claim 3, characterised in that the stop member (11) comprises a guiding edge (11a), which is in cooperation with the guide element (7) and is turnable relative to said guiding piece (10).

10 5. An arrangement according to claim 4, characterised in that the guiding piece (10) comprises wedge-shaped guide surfaces (10a) for the stop member (11).

15 6. An arrangement according to any one of the preceding claims, characterised in that said protrusion (7c) of the guide element is provided with a recess (7d), where the stop member (11) is normally located so as to prevent said turning movement of the stop member (11), while the latch bolt (3) and the auxiliary bolt (8) are in their protruding positions.

20 7. An arrangement according to claim 6, characterised in that the latch bolt (3) is provided with a guide surface (4a), which is arranged to move the guide element (7) so as to release the stop member (11) from the impact of said recess (7d), when the latch bolt (3) is pressed into the lock case (1).

25 8. An arrangement according to claim 7, characterised in that said guide surface (4a) is connected to a deadlocking member (4) of the latch bolt, which member the guide element (7, 7a) is arranged to act upon in order to accomplish deadlocking of the latch bolt.

30 9. An arrangement according to any one of the preceding claims when applied to a lock case, which is also provided with a dead bolt (13), character-

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ised in that said guide element (7) is arranged to guide also the  
movements of the dead bolt (13).